CLASSIFICATION S-E-C-R-E-T
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY

INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT
CD NO.

50X1-HUM

COUNTRY USSR

SUBJECT Scientific - Chemistry, diazo compounds, polyhydric alcohols

DATE OF INFORMATION 1946 - 1949

HOW PUBLISHED Monthly periodical

DATE DIST. 17 Dec 1952

WHERE PUBLISHED Moscow/Leningrad

NO. OF PAGES 2

DATE PUBLISHED 1946 - 1949

LANGUAGE Russian

SUPPLEMENT TO REPORT NO.

THIS IS UNEVALUATED INFORMATION

SOURCE Zhurnal Obshchey Khimii, Vol XVI-XIX, 1946 - 1949.

ACTIVITIES OF THE STATE INSTITUTE OF APPLIED CHEMISTRY, LENINGRAD, ON THE BASIS OF WORK PUBLISHED DURING 1946 - 1949

The State Institute of Applied Chemistry at Leningrad was founded in 1919. One of the founders of this institute was the famous organic chemist A. Ye. Favorskiy, according to N. A. Domnin's article, "In Memoria of A. Ye. Favorskiy (1860 - 1945), Zhurnal Obshchey Khimii," Vol XVI, No 9, 1946, pp 1316-1358.

/A review of the work published in Zhurnal Obshchey Khimii during 1946 - 1949 by members of this institute reveals the following major subdivisions:/

Research on Diazo Compounds

I. V. Grachev, Concerning the Structure and Transformations of Diazo Compounds. "II. On Various Forms of p-Nitrodiazobenzene," Vol XVII, No 10, 1947, pp 1834-1842.

B. A. Poray-Koshits (Leningrad Technological Institute) and I. V. Grachev, "III. Mesomerism and Nomenclature in the Series of Diazo Compounds," Vol XVII, No 10, 1947, pp 1843-1848.

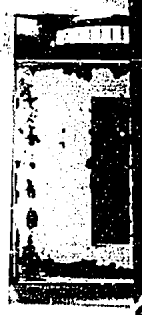
I. V. Grachev, "IV. Formation and Transformations of p-Nitrophenylnitrosoaminate," Vol XVII, No 12, 1947, pp 2268-2276.

I. V. Grachev and V. M. Shour, "VII. The Oxidative Capacity of Various Forms of Diazo Compounds," Vol XVIII, No 6, 1948, pp 1179-1186.

I. V. Grachev and N. A. Kirzner, "VIII. Acidic and Basic Properties of Diazo Compounds," Vol XVIII, No 8, 1948, pp 1525-1536.

I. V. Grachev and N. A. Kirzner, "IX. Direction and Velocity of Tautomeric Transformations in the Series of Diazo Compounds," Vol XIX, No 7, 1949, pp 1334-1343.

STATE	NAVY	NSRB	DISTRIBUTION
ARMY	AIR	FBI	



/While this is a general investigation of properties of diazo compounds, some of the results obtained may very well be applied in work on explosives of the diazo type and explosives, oxidants, additives to fuels, etc., of the nitrosoamine type./

Research on Cellulose Esters and Polyhydric Alcohols

N. G. Belen'kaya and N. A. Belozerskiy, "Electrolytic Reduction of Glucose," Vol XIX, No 9, 1949, pp 1664-1668.

/Reduction of glucose leads to mannitol and sorbitol. By nitrating these alcohols, explosives can be obtained. Mannitol and sorbitol can also be used for many other purposes./

S. N. Danilov, M. A. Sokolovskiy, and A. I. Evdokimova, "Mixed Esters of Cellulose. Mechanism of the Reaction of Acetylation of Nitrocellulose With Acetic Acid in the Process of Preparing Nitroacetylcellulose," Vol XVII, No 10, 1947, pp 1888-1893.

/The purpose of this investigation is presumably production of plastics, films, and fibers. Nitrocellulose explosives are only involved in the sense that excessive supplies of them may be converted into acetyl cellulose (or mixed esters for plastics) under use of this process./

Research on Silicon Plastics

B. N. Dolgov and O K. Panina, "Behavior of Triethylphenylmonosilane Under the Conditions of the Friedel-Crafts Reaction," Vol XVII, No 7, 1948, pp 1293-1296.

Miscellaneous

V. D. Lyashenko and T. A. Sokolova, "Investigation of the Interaction of Diketene With Aromatic Amines," Vol XVII, No 10, 1947, pp 1868-1875.

Ya. I. Zil'berman and P. T. Ivanov, "Solubility in the Systems $MgCl_2$ + * $Na_2S_2O_3$ = MgS_2O_3 + 2 NaCl and $CaCl_2$ + $Na_2S_2O_3$ = CaS_2O_3 + 2NaCl"

/According to a statement in the text, this is a continuation of work on the preparation of thiosulfates of alkaline earth metals./

- E N D -